APPENDIX E

Well Permit Number E201502212

WELL PERMIT

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit	enmonen.									
Certifying Driller: CARMINE DECORSO, JOURNEYMAN LICENSE # 0002423										
Permit Issued to: LUTZ ENVIRONMENTAL										
Company Address: 2020 CLINTON ST PO BOX 1247 LINDEN, NJ 07036										
PROPERTY OWNER										
Name: ARSYNCO INC ARSYNCO INC										
Organization: Arsynco Inc										
Address: PO# Box 8										
City: Carlstadt State: New Jersey Zip Code: 07072	***************************************									
PROPOSED WELL LOCATION										
Facility Name: Former Arsynco Inc										
Address: 511 Thirteenth Street										
County: Bergen Municipality: Carlstadt Boro Lot: 1 Block: 91										
Easting (X): 607537 Northing (Y): 729543 Local ID: MW-43D Coordinate System: NJ State Plane (NAD83) - USFEET										
SITE CHARACTERISTICS										
PROPOSED CONSTRUCTION										
WELL USE: MONITORING Other Use(s):	.									
Diameter (in.): 4 Regulatory Program Requiring Wells/Borings:										
Depth (ft.): 30 Case ID Number:	- 1									
Pump Capacity (gpm): 0 Deviation Requested: N										
Drilling Method: Hollow Stem Augers										
Attachments:	.									
SPECIFIC CONDITIONS/REQUIREMENTS										

Approval Date: March 16, 2015 Expiration Date: March 15, 2016 Approved by the authority of: Bob Martin Commissioner

Terry Pilawski, Chief Bureau of Water Allocation and Well Permitting

Well Permit -- Page 1 of 2

Jerry D. P. lawski

Well Permit Number E201502212

MONITORING WELL RECORD

PROPERTY	OWNER:	ARSYNCO IN	C ARSYNCO	INC						
	ganization: A									
	Address: PO# Box 8 Carlstadt, New Jersey 07072									
- April 1997		rmer Arsynco		0.000 0.000	and the second s					
	11 Thirteenth S	9000		A CONTRACTOR OF THE CONTRACTOR	A COMMENT OF THE PROPERTY OF T					
***************************************	***************************************		y: Carlstadt Bo	oro	Lot: 1	Block: 91				
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~									
			(Y): <u>729578</u> NAD83) - USF	EET D		FARTED: March 25, 2 PLETED: March 25, 2				
L	MONITOR				ALD WELL COM	And the state of t				
				orientemportiliste au anno oriente de plante de proposition de proposition de proposition de proposition de pr	Local ID: M	W-43D				
				COMMITTED TO THE CONTRACT OF T	State of the state		A 470, 20070 A 470 A			
	STRUCTION		Y1' ' 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11 To - 41 (O.).	22	357-11 GC Al	Coods			
Total Depth	- / ***********************************	32		ell Depth (n.):		***************************************	ve Grade			
	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)		Material		g/Screen # Used s/ch no.)			
Borehole 0 32 12										
Casing	0	27	4		PVC	S	ch 40			
Casing	0	16	12		Steel		LBS			
Screen	27	32	4		PVC	.0	10 slot			
	Depth to	Depth to	Outer	Inner		Material	\$77			
Grout	Top (ft.)	Bottom (ft.)	Diameter (in.)	Diameter (in)	Bentonite (lbs.) 77.5	Neat Cement (lbs.)	Water (gal.) 133.3			
Gravel Pack	23	32	12	4	17.0	morie #1				
Grouting Met	hod: Pressur	e method (Trer	nie Pipe)	Dri	lling Method: Air	Rotary/HSA				
Protective Ca Static Water I Water Level I Well Develop		elow land surfa m-scope 1 hrs.	ce	To Dri Dri	mp Capacity: _ gpm tal Design Head: _ ft Illing Fluid: Il Rig: <u>IR T3W</u> alth and Safety Plan	t.				
ATTACHM	ENTS:					34445. Addings				
GEOLOGIC			. f	V 600 -31-	1 - 1 - 1	hydrona 1	a amural			
				city silt w/peat		t w/trace sand and coars	se gravei			
				dium-fine sand			A PARTIE A P			
					y/sandy/silty/lean cl		A			
22 - 32: light trace of clay s		y CL - Inorgan	ic clays of low	to medium plast	icity, gravelly/sandy	/silty/lean clays clay si	It w/some fine sand			
ADDITION/	L INFORM	ATION:								
Driller of Rec	Nick Voord: MONIT	Voetko, CORING LICE	NSE # 545114		Company:	LUTZ ENVIRONM	ENTAL			



## New Jersey Department of Environmental Protection Site Remediation Program

### MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

Date Stamp
(For Department use only)

	(For Department use only)
SECTION A. SITE NAME AND LOCATION	
Site Name: FORMER ARSYNCO TUC	
List all AKAs:	A A A STATE OF THE
Street Address: 511 THIRTEENTH STREET	
Municipality: CARISTAGT BORO (Township, Borou	
County: RERGED Zip Code: O'N	
Program Interest (PI) Number(s): Case Tracking Nu	ımber(s):
SECTION B. WELL OWNER AND LOCATION	
1. Name of Well Owner ARSYNCO INC PO#Box 8	Broro EU HEATSIRE
2. Well Location (Street Address) 511 THIRTEETH STREET	
3. Well Location (Municipal Block and Lot) Block#	Lot#
SECTION C. WELL LOCATION SPECIFICS	
1. Well Permit Number (This number must be permanently affixed to the well casing):	
2. Site Well Number as shown on application or plans):	MW-43D
3. Well Completion Date:	3-25-15
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):	9,
5. Total Depth of Well to the nearest ½ foot:	-3 (1)
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):	
7. Screen Length (or length of open hole) in feet:	
8. Screen or Slot Size:	0.10 516+
9. Screen or Slot Material:	SCH 40 PUC 0.105/18
10. Casing Material (PVC, steel, or other – specify):	A 3
11. Casing Diameter (inches): STEEL / PUC	
12. Static Water Level from top of casing at the time of installation (nearest 0.01'):	6'
13. Yield (gallons per minute):	1/4 GPM.
14. Development Techinque (specify):	12 V Fump
15. Length of Time well is developed/pumped or bailed (hours and minutes):	1 HR



### **New Jersey Department of Environmental Protection**Site Remediation Program

#### **Monitoring Well Certification Form B - Location Certification**

Date Stamp (For Department use only)

	(For Department use only)								
SECTION A. SITE NAME AND LOCATION									
Site Name: Arsynco, Inc.									
List all AKAs:									
Street Address: 511 13th Street									
Municipality: Borough of Carlstadt	(Township, Borough or City)								
County: Bergen	Zip Code: 07072								
Program Interest (PI) Number(s): 93024	Case Tracking Number(s):								
SECTION B. WELL OWNER AND LOCATION	ON								
1. Name of Well Owner Arsynco, Inc.									
	th Street, Carlstadt NJ								
3. Well Location (Municipal Block and Lot)	Block# 91 Lot # 1								
SECTION C. WELL LOCATION SPECIFICS									
Well Permit Number (This number must be	e permanently affixed to the well casing): E201502212								
2. Site Well Number (As shown on application	on or plans): MW 43D								
3. Geographic Coordinate NAD 83 to neares	st 1/100 of a second:								
Latitude: North 40-50-07.89	Longitude: West 74-04-58.49								
4. New Jersey State Plane Coordinates NAI	0 83 datum, US survey feet units, to nearest foot:								
North <u>729,552.5</u>	East 607,528.7								
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 6.88									
Elevation Top of Outer casing: 7.22	Elevation of ground: 4.44								
Check one:   NAVD 88 □ NVGD2									
6. Source of elevation datum (benchmark, n here, assume datum of 100', and give app	umber/description and elevation/datum). If an on-site datum is used, identify proximated actual elevation (referencing NAVD 88).								
Elevations based on GPS observa	ations.								
7. Significant observations and notes:									
None									
SECTION D. LAND SURVEYOR'S CERTIFI	CATION SEAL								
I certify under penalty of law that I have personal	illy examined and am familiar with the								
information submitted in this document and all a those individuals immediately responsible for ob-	tachments and that, based on my inquiry of taining the information. I believe the								
submitted information is true, accurate and com	plete. I am aware that there are significant								
penalties for submitting false information includi Professional Land Surveyor's Signature:									
Surveyor's Name: Russell J. Palubniak	Date License Number: NJPLS#37953								
Firm Name: DPCSS Land Surveyors									
Mailing Address 14 Carriage Way	Certificate of Authorization #:								
City/Town: Barnegat	State New Jersey Zip Code: 08005								
Phone Number 609-276-4902									
Thomas Number 300 270 4002	Ext.: Fax: 609-698-5350								

109 Brid	dge Avei	nue Bldg	ı. B, Poin		t, New	I <b>sultants</b> , Jersey 08742	, Inc.	Вс	oring for L	ocation:	MW-43D		
Permit	t #: N/A	4			Loc	ation: Foot of	13th Street, Carlstadt, New Jers	еу	G.W. Encour	Static Water: 2.99' TO			
Site Na	ame: A	Arsynco	)		Pro	ject: ISRA cas	se JMC Job #: 22126		Well - Depth	: 31.5' BSG	Diameter: 4"		
Owner	r: Arsyı	nco					Use: Groundwater sampling		Casing - Len	gth: 12' & 26.5	Diameter: 12" & 4"		
Boring	Drill I	Date: 3	3/25/15				Type: Hollow Stem		Screen - Len	-	Diameter: 4"		
Boring	Drille	r: Lutz	Enviro	nmenta	l Well	Drilling	Purge Method: Submersible T	Method: Submersible Typhoon pump   Screen Type: Sch 40 .010 in.					
oring	Rig:	Ingers	all Ran	d T3W F	Rig		Sample Method: N/A		Bentonite: 0	- 25' below gra	de		
riller	/Helpe	r: Nick	/ Ronn	ie			Sample Parameters: N/A		Sand Pack:	2.0' above scre	en		
ampl	ing Me	ethod:	N/A				Sampler: N/A		Depth to PVC Rim: +2.44'				
Depth (ft.)	Sample ID and Depth OVM (Meter Units) Blows/6.0" Recovery				Soil Type		Soil/Geologic Descri	ption	(#) ##  Boring Diagram				
1	1 250 0'-5.0'			0'-5.0'	Brown black fine to medium silty S	AND with fine crus	shed gravel	1					
3		297					(wet at 1.0')			3	<u> </u>		
4 5										4 5			
6 7		197				5.0'-9.0'	Brown black fine to medium GRAV	EL with organics		6 7			
8		101								8 9			
10						9.0'-11.0'	Brown fine to medium silty SAND			10 11			
12		125				11.0'-21.0'	Dark Grey CLAY with some silt			12			
13 14		66.8					12" Steel casing set to 12'			13 — ₁₄			
15 16										15 16			
17 18		23.8								17 18			
19 20										19 20			
21		0.0				21.0'-28.0'	Grey CLAY with little silt			21 			
23										23 — 24			
25										25			

2109 Bri	dge Aven	ue Bldg. E		sant, Ne	nsultant		Воі	ring for Location:	MW-43D			
	#: N/A		1. 5-) 250		cation: Foot	of 13th Street, Carlstadt, New Jersey		G.W. Encountered: 1.50' BS	G Static Water: 2.99'			
Site Na	ame: A	rsynco			oject: ISRA			Well - Depth: 31.5' BSG	Diameter: 4"			
Owner	: Arsyr	ico				Use: Groundwater sampling		Casing - Length: 12' & 26.5'				
Boring	Drill D	Date: 3/2	25/15			Type: Hollow Stem		Screen - Length: 5'	Diameter: 4"			
Boring	Drille	r: Lutz E	invironme	ntal We	ell Drilling	Purge Method: Submersible Typl	hoon pump	Screen Type: Sch 40 .010 in				
Boring	Rig:	Ingersal	Rand T3	W Rig		Sample Method: N/A		Bentonite: 0 - 25' below grad				
Driller	Helpe	: Nick /	Ronnie			Sample Parameters: N/A		Sand Pack: 2.0' above screen				
Sampl	ing Me	thod: N	/A			Sampler: N/A		Depth to PVC Rim: +2.44'				
Depth (ft.)	Sample ID and Depth	OVM (Meter Units)	Blows/6.0" Recovery	Soil Type		Soil/Geologic Descriptio	n	Depth (ft.)	Boring Diagram			
26 27 28 29 30 31 32		12.3			28.0'-32.0'	Grey CLAY with some silt and trace (-Driller Note: formation tightened up @						
33 34 35 36						Boring advanced to 32 feet below grad Monitoring well set at 31.5 feet below Groundwater encountered at 1.0 feet t Steel casing set at 12' below grade	grade.	33 34 35 36				
37 38 39 40 41 42 43 44 45 46 47 48 49						*Drawing vertically to scale		37 38 39 40 41 42 43 44 45 46 47 48 49				

î



Well Permit Number **E201502215** 

#### WELL PERMIT

The New Jersey Department of Environment accompanying same application, and applica enumerated in the supporting documents whi	ble laws and regulations	. This permit is also	subject to further conditions and stipulations							
Certifying Driller: CARMINE DEC	ORSO, JOURNEYMAI	N LICENSE # 00024	423							
Permit Issued to: LUTZ ENVIRON	MENTAL									
Company Address: 2020 CLINTON S	ST PO BOX 1247 LINI	DEN, NJ 07036								
PROPERTY OWNER										
Name: ARSYNCO INC ARSYNCO INC	C									
Organization: Arsynco Inc										
Address: PO# Box 8										
City: Carlstadt	State: New Jersey Zip Code: 07072									
PROPOSED WELL LOCATION										
Facility Name: Former Arsynco Inc										
Address: 511 Thirteenth Street										
County: Bergen Municipality:	Carlstadt Boro	Lot: 1	Block: 91							
Easting (X): 607588 Northing ( Coordinate System: NJ State Plane (NA		Local ID:	MW-44DD							
SITE CHARACTERISTICS										
PROPOSED CONSTRUCTION										
WELL USE: MONITORING	Oth	er Use(s):	And the second s							
Diameter (in.): 2		gulatory Program puiring Wells/Boring	gs:							
Depth (ft.): 85										
Pump Capacity (gpm): 0			N							
Drilling Method: Mud Rotary										
Attachments:										
SPECIFIC CONDITIONS/REQUIREMEN										

Approval Date: March 16, 2015 Expiration Date: March 15, 2016 Approved by the authority of: Bob Martin Commissioner

...

Jerry Dilawski, Chief
Bureau of Water Allocation and Well Permitting

Well Permit - Page 1 of 2

Well Permit Number E201502215

#### MONITORING WELL RECORD

			27207111	CALLETO III	WIND RESCURED						
PROPERT	Y OWNER:	ARSYNCO I	NC ARSYNCO	INC							
	rganization:										
	-	lstadt, New Jer	sey 07072								
WELL LO	CATION: F	ormer Arsynco	Inc								
Address: -5	11 Thirteenth	Street					60000000000000000000000000000000000000				
County: Be	ergen	Municipali	ty: Carlstadt B	ого	Lot: 1	Block	91	The state of the s			
Easting (X):	607546	Northine	(Y): 729657		DATE WELL C	TADTED Manal	26 2016				
Coord	inate System: 1	NJ State Plane	(NAD83) - USF		DATE WELL COM	TARTED: March					
					ALE WELL COM	TLEIED; Watch	21, 2013				
WELL USE: MONITORING  Other Use(s): Local ID: MW-44DD											
	NSTRUCTION			20 00000000000000000000000000000000000	**************************************	The second se		.0004000000000000000000000000000000000			
Total Depth	Drilled (ft.):_	98	Finished W	ell Depth (ft.):_	98	Well Surface:	Above Grade	e			
	Depth to Depth to Diameter Material Wgt/Rating/Screen # Used										
Top (ft.) Bottom (ft.) (inches) (lbs/ch no.)											
Borehole	40	98	10				EST-St-A-4000-0				
Casing	0	14	6		C. 1		***************************************				
Casing	0	93	2		Steel		LBS	60			
Casing	0	40	6		PVC		Sch 40				
Screen	93	98	2		Steel PVC		19 LBS				
					PVC		.010 slot	***************************************			
4	Depth to Top (ft.)	Depth to	Outer	Inner		Material					
Grout	0	Bottom (ft.)	Diameter (in.)	Diameter (in)		Neat Cement (lbs.		nter (gal.)			
Grout	0	40	10	6	112.5 57.5	2115 1081		193.5			
Gravel Pack	90	98	6	2	37.3	morie #1		98.9			
Grouting Met	hod: Pressure	e method (Tren	nie Pipe)	Dri	lling Method: Othe	The second secon					
<b>ADDITIONA</b>	L INFORMA	TION			A Military or a second control of the second			ACTION OF PERSONS AND ASSESSMENT AND ASSESSMENT ASSESSM			
Protective Cas	sing: Yes			Pur	mp Capacity: _ gpm						
Water I evel N	Level: 19 ft, b	elow land surf	ace	Tot	al Design Head: _ ft						
Well Develop	ment Period:	l hrs.			lling Fluid: <u>Quick G</u> ll Rig: <u>IR T3W</u>	<u>el</u>					
Method of De	velopment: 12	V pump			alth and Safety Plan	Submitted? Yes					
Pump Type:					,	and the same of th					
ATTACHME											
GEOLOGIC								· · · · · · · · · · · · · · · · · · ·			
0 - 6: dark greg	y ML - Inorgai	nic silts, very f	ine sands, rock	four, silty or cla	yey fine sands silt w	/medium-fine sand	& traces of	coarse			
	- Peat, muck	and other high	ly organic soils	neat and assess	cs w/trace clay & si						
9 - 22: brown	CL - Inorganic	clays of low to	medium nlasti	city gravally/ca	ndy/silty/lean clays	<u> </u>					
22 - 31: light b	rown ML - Inc	organic silts. ve	erv fine sands n	ock four eilty o	r clayey fine sands s	ilt/t	C				
pumeria							rine sand tra	ice clay			
31 - 37: grey se	ome brown MI	L - Inorganic si	lts, very fine sa	nds, rock four,	silty or clayey fine sa	ands clayey silt					
37 - 63: light g	rey and brown	ML - Inorgan	c silts, very fine	sands, rock for	ur, silty or clavey fir	e sands silt w/fine s	and clay str	ingers			
63 - 78: light g	rey and multi	color SM - Silt	y sands, sand-si	lt mixtures med	ium-coarse sand son	ne silt & clay string	ers				
****	Carmina	DeCorso,									
Driller of Reco	ord: JOURNE	SYMAN LICE	NSE # 0002423		Company	LUTZ ENVIDON	MENTAL				

Record - Page 1 of 2



# New Jersey Department of Environmental Protection Site Remediation Program

### MONITORING WELL CERTIFICATION FORM A - AS-BUILT

CERTIFICATION	(For Department use only)
SECTION A. SITE NAME AND LOCATION	
Site Name: FORMER ARSYNCO INC.	
List all AKAs:	
Street Address: 511 THIRTEENTH STREET	*****
Municipality: CARISTAGE BORO (Township, Borough	
County: BERGED Zip Code: OTOT	97
Program Interest (PI) Number(s): Case Tracking Numb	er(s):
SECTION B. WELL OWNER AND LOCATION	1 1 1
1. Name of Well Owner ARSYNCO INC PO#Box 8 Cui	Ustadt 103 ordia
2 Well Location (Street Address) 511 THIR FEETH STREET	
3. Weil Location (Municipal Block and Lot)  Block#L	ot#
SECTION C. WELL LOCATION SPECIFICS	
1. Well Permit Number (This number must be permanently affixed to the well casing):	E201502215
2. Site Well Number as shown on application or plans):	AR PP-WM
2. Old Woll Hallbor do Diown of application	3-0(-15
3. Well Completion Date:	3 06 10
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):	9,
	7a'
5. Total Depth of Well to the nearest ½ foot:	
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):	43.
7. Screen Length (or length of open hole) in feet:	
8. Screen or Slot Size:	0.10 Slot
9. Screen or Slot Material:	CH 40 Por 010510+
	Miles.
10. Casing Material (PVC, steel, or other – specify):	SIEEI + PC
11. Casing Diameter (inches): STEE!   STEE! Puc	0"/6"/2"
12. Static Water Level from top of casing at the time of installation (nearest 0.01'):	191
	1/4 CPM
13. Yield (gallons per minute):	7.17
14. Development Techinque (specify):	2 V Hump.
15. Length of Time well is developed/pumped or bailed (hours and minutes):	I HR



## **New Jersey Department of Environmental Protection**Site Remediation Program

### **Monitoring Well Certification Form B - Location Certification**

Date Stamp
(For Department use only)

				(For Department use only)							
SE	CTION A. SITE NAME AND LOCATION										
Sit	e Name: Arsynco, Inc.										
Lis	t all AKAs:										
Str	eet Address: 511 13th Street										
Μu	nicipality: Borough of Carlstadt		(Township, Borou	gh or City)							
Co	unty: Bergen		Zip Code:070	072							
Pro	gram Interest (PI) Number(s): 93024		Case Tracking	Number(s):							
SE	CTION B. WELL OWNER AND LOCATION										
1.	Name of Well Owner Arsynco, Inc.										
2.	Well Location (Street Address) 511 13th Street, 0	Carlstadt NJ									
3.	Well Location (Municipal Block and Lot)  Blo	ock# 91		Lot # _1							
SE	CTION C. WELL LOCATION SPECIFICS										
1.	Well Permit Number (This number must be permane	ently affixed	to the well casing): _E	E201502215							
2.	Site Well Number (As shown on application or plans	i): MW 44D	D								
3.	Geographic Coordinate NAD 83 to nearest 1/100 of	a second:									
	Latitude: North 40-50-08.85		Longitude: West 74	1-04-58.03							
4.	4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:										
	North 729,648.8 East 607,564.2										
5.	5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 6.76										
	Elevation Top of Outer casing: 6.93	Elevation	on of ground: 4.18								
		On Site Datu									
6.	Source of elevation datum (benchmark, number/des here, assume datum of 100', and give approximated	cription and actual eleva	elevation/datum). If ation (referencing NA)	an on-site datum is used, identify VD 88).							
	Elevations based on GPS observations.										
7.	Significant observations and notes:										
	None										
SE	CTION D. LAND SURVEYOR'S CERTIFICATION			SEAL							
l ce	rtify under penalty of law that I have personally examine	ed and am far	miliar with the								
tho	rmation submitted in this document and all attachments se individuals immediately responsible for obtaining the	information,	I believe the								
sub	mitted information is true, accurate and complete. I am alties for submitting false information including the poss	aware that the	nere are significant								
	fessional Land Surveyor's Signature:	Jointy of lifte	and imprisonment.	Dete							
1	veyor's Name: Russell J. Palubniak		Lion	Date nse Number: NJPLS#37953							
	n Name: DPCSS Land Surveyors		Certificate of Aut								
	ling Address 14 Carriage Way		Confined to Aut								
	r/Town: Barnegat	State	New Jersey	Zip Code: 08005							
	one Number 609-276-4902	Ext.:		Fax: 609-698-5350							

2109 Br Phone:	idge Avei (732) 29	nue Bldg 5-2144	. B, Poin Fax: (73	t Pleasant 2) 295-215	, New . 50_	Jersey 08742		Во	ring for L	ocatio	n: M\	N-44	DD	
Permit #: N/A Location: Foot of						ation: Foot of	13th Street, Carlstadt, New Jer	sey	G.W. Encoun	. Encountered: 1.50' BSG Static Water: 0.				
Site N	ite Name: Arsynco Project: ISRA ca					ect: ISRA ca	se JMC Job #: 22126		Well - Depth:	101.5' BS	3	Diame	ter: 2"	
Owne	Owner: Arsynco						Use: Groundwater sampling		Casing - Len	gth: 14' & 4	10' & 96	. Diame	ter: 10" & 6"& 2"	
3orin	oring Drill Date: 3/26/15 and 3/27/2015					5	Type: Mud Rotary		Screen - Len	gth: 5'		Diameter: 2"		
3orin	g Drille	r: Lutz	Enviro	nmental	l Well	Drilling	Purge Method: Submersible	Typhoon pump	Screen Type	: Sch 40 .01	10 in.			
3orin	g Rig:	Ingers	all Ran	d T3W F	Rig		Sample Method: N/A		Bentonite: 0	- 93' below	grade			
Orille	/Helpe	r: Nick	/ Ronr	nie			Sample Parameters: N/A		Sand Pack:	3.5' above s	creen			
Samp	ling Me		N/A				Sampler: N/A		Depth to PVC	Rim: +2.5	8'			
Depth (ft.)	Sample ID and Depth	OVM (Meter Units)	Blows/6.0"	Recovery	Soil Type		Soil/Geologic Desc	ription		Depth (ft.)			Boring Diagram	
					1	0'-5.0'	Black fine to medium silty SAND	with gravel				$\Box$		
		0.0					act into to modium only OAND	grator		1				
- 2													<u> </u>	
•							(wet at 1.5')			2				
	3									3				
	1									- 4				
	5	23.2				5.0'-7.0'	Black brown meadow mat with fir	o to modium CAND		5				
_ (	3					5.0-7.0	trace (-) fine gravel	ie to medium SAND		6				
_							.,					1	1	
	<b>'</b>					7.0'-17.0'	Grey CLAY			7				
_ 8	3					7.0-17.0	GIEV CLAT			- ₈				
_														
	,									9				
10	)									10				
- ₁										- 11				
										11				
1:	2									12				
_ 1:	3									— ₁₃				
14	1						10" Steel Casing set to 14.0'			14				
1!	5									15				
							Start of Mud rotary at 14.0'							
16	)									16				
17	7									17				
18						17.0'-30.0'	Drilling Mud: Formation is Grey S		nd					
16	,						trace (-) fine sand (loose formation	) iii		18				
19	9									19				
	1									_ 20				
20										20				
2	1									21			1-	
_ 22	2									_ ₂₂				
23	3									23				
24	1									24				
										25				

2109 Bri	idge Ave	enue Bldg	, B, Poir		, New .	<b>sultants,</b> Jersey 08742	Inc.		Во	oring for	Locati	on: M\	W-44DD		
Permi	t #: N/	Α			Loca	ation: Foot of	13th Stre	et, Carlstadt, New	Jersey	G.W. Encou	ıntered: 1.	50' BSG	Static Water: 0.99' TO		
Site N	Site Name: Arsynco Project: ISRA						se	JMC Job #: 2212	6	Well - Depth: 101.5' BSG			Diameter: 2"		
Owne	r: Arsy	nco					Use: Groundwater sampling			Casing - Le	ngth: 14'	& 40' & 96	. Diameter: 10" & 6"& 2"		
Boring	g Drill	A STATE OF THE STA							Diameter: 2"						
	~			nmenta		Drilling	Purge	Method: Submers	ible Typhoon pump	Screen Typ	e: Sch 40	.010 in.			
		-		d T3W F	Rig			le Method: N/A				3' below grade			
-	-		/ Ronr	nie			-	le Parameters: N/A			: 3.5' above screen				
Samp	_	ethod:	N/A				Samp	ler: N/A		Depth to PV	/C Rim: +:	2.58'			
Depth (ft.)	Sample ID and Depth	OVM (Meter Units)	Blows/6.0"	Recovery	Soil Type			Soil/Geologic D	Description		Depth (ft.)		Boring Diagram		
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 50 50 50 50 50 50 50 50 50						30.0'-40.0' 40.0'-58.0'	(Tight F	Formation)	ey CLAY with silt and sa		26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50				

#### JMC Environmental Consultants, Inc. **Boring for Location: MW-44DD** 2109 Bridge Avenue Bldg. B, Point Pleasant, New Jersey 08742 Phone: (732) 295-2144 Fax: (732) 295-2150 Permit #: N/A Location: Foot of 13th Street, Carlstadt, New Jersey G.W. Encountered: 1.50' BSG Static Water: 0.99' TOC Site Name: Arsynco Project: ISRA case JMC Job #: 22126 Well - Depth: 101.5' BSG Diameter: 2" Owner: Arsynco Casing - Length: 14' & 40' & 96. Diameter: 10" & 6"& 2" Use: Groundwater sampling Boring Drill Date: 3/26/15 and 3/27/2015 Type: Mud Rotary Screen - Length: 5' Diameter: 2" Boring Driller: Lutz Environmental Well Drilling Purge Method: Submersible Typhoon pump Screen Type: Sch 40.010 in. Boring Rig: Ingersall Rand T3W Rig Sample Method: N/A Bentonite: 0 - 93' below grade Driller/Helper: Nick / Ronnie Sample Parameters: N/A Sand Pack: 3.5' above screen Sampling Method: N/A Sampler: N/A Depth to PVC Rim: +2.58' Sample ID and Depth OVM (Meter Units) **Boring** Depth (ft.) Recovery Soil/Geologic Description Diagram Soil 51 51 52 52 53 53 54 54 Driller Note: Formation loosened at 54.0' 55 55 56 56 57 57 58 58 58.0'-70.0' Drilling Mud : Formation is Brown with fine silty SAND 59 and crushed gravel 59 60 60 61 61 62 62 63 63 64 64 65 65 66 66 67 67 68 68 69 69 70 70 70.0'-85.0' Drilling Mud: Formation is Brown red crushed GRAVEL (Loose Formation) 71 72 72 73 73 74 75 75

2109 Br	JMC Environmental Consultants, Inc.  Boring for Location: MW-44DD  109 Bridge Avenue Bldg. B, Point Pleasant, New Jersey 08742  Phone: (732) 295-2144 Fax: (732) 295-2150										
						ect: ISRA case	Use: Groundwater sampling	G.W. Encountered: 1.50' BSG Well - Depth: 101.5' BSG Diameter: 2" Casing - Length: 14' & 40' & 96. Screen - Length: 5' Diameter: 2" Screen Type: Sch 40 .010 in. Bentonite: 0 - 93' below grade Sand Pack: 3.5' above screen			
							Type: Mud Rotary Purge Method: Submersible Typhoon pump Sample Method: N/A Sample Parameters: N/A				
Depth (ft.)	Sample ID and Depth	OVM (Meter Units)	Blows/6.0"	Recovery	Soil Type		Sampler: N/A Soil/Geologic Desc	cription	Depth to PVC	Depth (ft.)	Boring Diagram
766 777 788 800 811 822 833 844 855 866 877 888 899 90 911 922 93 944 95 96 97 98 99 99						85.0'-105.0'	Driller Note: Tightened up from 8  Drilling Mud: Formation is Brown and trace (-) fine crushed rock			76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98	

JMC Environmental Consultants, Inc.  Boring for Location: MW-44DD  2109 Bridge Avenue Bldg, B, Point Pleasant, New Jersey 08742  Phone: (732) 295-2144 Fax: (732) 295-2150										on: MW-44DD		
					Loc		13th Street, Carlstadt, New Jersey ie JMC Job #: 22126 Use: Groundwater sampling		G.W. Encountered: 1.50' BSG			
Boring Drill Date: 3/26/15 and 3/27/2015 Boring Driller: Lutz Environmental Well Drilling Boring Rig: Ingersall Rand T3W Rig Driller/Helper: Nick / Ronnie Sampling Method: N/A							Type: Mud Rotary Purge Method: Submersible Typhoon pump Sample Method: N/A Sample Parameters: N/A Sampler: N/A		Screen - Length: 5' Diameter: 2" Screen Type: Sch 40 .010 in. Bentonite: 0 - 93' below grade Sand Pack: 3.5' above screen Depth to PVC Rim: +2.58'			
Depth (ft.)	Sample ID and Depth	OVM (Meter Units)	Blows/6.0"	Recovery	Soil Type		Soil/Geologic Des	cription		Depth (ft.)	Boring Diagram	
101 102 103 104										101 102 103 104 105		
106							Boring advanced to 105 feet be Monitoring well set at 101.5 fee Groundwater encountered at 1. 10" Steel casing set at 14.0' 6" Steel casing set at 40.0'	below grade.		106 107 108 109		
110							*Drawing vertically to scale			110 111		
112	3									112 113 114		
115										115 116		
117	3									117 118 119		
120	)									120		
122	3									122		
125										124		